

CLAIMS

What is claimed is

1. A wheel assembly comprising:
 - a hub;
 - a plurality of drive pins mounted on said hub;
 - a rotor having a plurality of slots; and
 - a plurality of alignment bushings, each said alignment bushing slidably inserted in one of said slots in said rotor, each said alignment bushing slidably held by one of said drive pins.
2. A wheel assembly as in claim 1, further comprising:
 - an adapter mounted on said hub, said drive pins mounted to said adapter.
3. A wheel assembly as in claim 1, further comprising:
 - a plurality of drag rings, each said drag ring located between one of said alignment bushings and the drive pin by which said one alignment bushing is held.
4. A wheel assembly as in claim 3,
 - wherein each said alignment bushing has a drag ring groove, and one of said drag rings is held in said drag ring groove.
5. A wheel assembly as in claim 1,

wherein each said alignment bushing has at least one flange, said flange substantially restricting movement of said alignment bushing in a direction perpendicular to the plane of one of said slots of said rotor when the alignment bushing is inserted therein.

6. A wheel assembly as in claim 5,

wherein each said alignment bushings has at least two flanges, said flanges substantially restricting movement of said alignment bushing in a direction perpendicular to the plane of one of said slots of said rotor when the alignment bushing is inserted therein.

7. A wheel assembly as in claim 5, further comprising:

a plurality of retaining rings, each said drive pin having a retaining ring groove for holding a respective one of said retaining rings, to retain one of said alignment bushings on each of said drive pins, and one of said retaining rings is mounted in each of said retaining ring grooves.

8. A wheel assembly as in claim 1,

wherein said slots of said rotor have substantially straight sides; and

wherein said alignment bushings have substantially straight sides along one axis.

9. A wheel assembly as in claim 8,

wherein said slots of said rotor are substantially D-shaped in configuration; and

wherein said alignment bushings are substantially D-shaped in configuration.

10. A disc brake rotor mounting system comprising:
 - a rotor having a plurality of slots;
 - a plurality of alignment bushings, each configured to be slidably insertable into one of said slots in said rotor and each having a drive hole therein; and
 - a plurality of drive pins, each configured to be mountable on a hub and to be slidably insertable into the drive hole of one of said alignment bushings.
11. A disc brake rotor mounting system as in claim 10, further comprising:
 - an adapter configured to be mountable on said hub and configured to receive said drive pins, said drive pins being mountable on said adapter.
12. A disc brake rotor mounting system as in claim 10, further comprising:
 - a plurality of drag rings, each configured to be couplable to one of said alignment bushings, and further configured to provide resistance to movement between one of said alignment bushings and a drive pin inserted into the drive hole of said one alignment bushing.
13. A disc brake rotor mounting system as in claim 12,
 - wherein each said alignment bushing has at least a partial groove configured to hold one of said drag rings.
14. A disc brake rotor mounting system as in claim 10,

wherein each said alignment bushing has at least one flange, said flange configured to substantially restrict movement of said alignment bushing in a direction perpendicular to the plane of one of said slots of said rotor when the alignment bushing is inserted therein.

15. A disc brake rotor mounting system as in claim 14,

wherein each said alignment bushings has at least two flanges, said flanges configured to substantially restrict movement of said alignment bushing in a direction perpendicular to the plane of one of said slots of said rotor when the alignment bushing is inserted therein.
16. A disc brake rotor mounting system as in claim 10, further comprising:

a plurality of retaining rings, and each said drive pins having a retaining ring groove for holding a respective one of said retaining rings for retaining one of said alignment bushings on each of said drive pins.
17. A disc brake rotor mounting system as in claim 10,

wherein said slots of said rotor have substantially straight sides; and
wherein said alignment bushings have substantially straight sides.
18. A disc brake rotor mounting system as in claim 17,

wherein said slots of said rotor are substantially D-shaped; and
wherein said alignment bushings are substantially D-shaped.
19. A method of installing a disc-drive rotor onto a hub comprising:

mounting a plurality of drive pins on said hub;
inserting a plurality of alignment bushings into respective slots in a rotor;
mounting said rotor onto said hub by inserting each of said drive pins into a hole in a
respective alignment bushing; and
securing said rotor to said hub by installing a retaining ring on each of said drive pins.

20. A method of installing a disc-drive rotor onto a hub as in claim 19 further comprising:
mounting an adapter on said hub; and
wherein said mounting a plurality of drive pins on said hub is replaced with mounting
a plurality of drive pins on said adapter.
21. A method of installing a disc-drive rotor onto a hub as in claim 19 further comprising:
inserting a drag ring into a receiving groove in each of said alignment bushings for
engaging a surface of the drive pin.
22. A method of installing a disc-drive rotor onto a hub as in claim 19 further comprising:
inserting a drag ring into a receiving groove on each of said drive pins for engaging a
surface of the alignment bushing.